Microwave and Optical Technology Letters
Author Index to Volume 5

Aanandan, C. K. See Ajaikumar, V., 557
See Dey, S., 709
Abdallah, E. A. See Mitkess, A. A., 130
Abiri, H. See Bakhtazad, A., 643
Abouzahra, M. D.
Comments on "A Simple Approach to a Four-Way Hybrid Ring Power Divider Design," 154
Abul-Shohoud, W. H. See Fares, D. A., 269
Abushagur, M. A. G. See Helaly, A., 633
Agarwal, A.
—; Kakatkar, S. S.; Sarkar, B. K.: Design, Analysis, and Development of a High Power, Low-Loss Lumped Coupler for VHF Applications, 240
Ajaikumar, V.
—; Jose, K. A.; Aanandan, C. K.; Mohanan, P.; Nair, K. G.: Backscattering Reduction of Corner Reflectors Using SCS Technique, 557
Ajaikumar, V. See Gomez, L. W., 171
Alam, M. S.
—; Karim, M. A.: Programmable Optical Perfect Shuffle Interconnection Network Using Fredkin Gates, 330
—; Karim, M. A.: Enhanced Correlation Discrimination Using Binary Joint Transform Correlation with Feedback, 752
Albinsson, B.
—; Schoon, M.: A Novel Amplifier Combining High Gain, Output Power, and Efficiency, 166
Allamando, E. A.
X-Band MMIC Voltage-Controlled Oscillator Using HEMTs, 395
Andrenko, A. S.
—; Nosich, A. I.: H-Scattering of Thin-Film Modes from Periodic Gratings of Finite Extent, 333
Arora, R. K.
—; Mongia, R. K.: Simple Expressions for Diffraction Loss in Open Resonators, 401
Arrizon, V.
—; Ojeda-Castaneda, J.: Phase Grating: Analytical Formulas for the Near Field, 483
See Ojeda-Castaneda, J., 429
Asensio, A.
—; Perez, F.: High-Power Microwave Bipolar Transistor Modeling, 10
Awwal, A. A. S. See Cherri, A. K., 279

Bahl, I. J.
—; Griffin, E. L.: Low Loss Electronically Tunable Bandpass Filters on the GaAs Substrate, 328
Bakhtazad, A.
—; Abiri, H.; Rahnavard, M. H.: Tapered Corrugation for Improving Characteristics of DFB and DBR Lasers, 643
Bangert, A. See Romero, M. A., 38
Barbosa, A. M. See Topa, A. L., 602
Beker, B. See Chen, Y., 275, 469
See Ho, T. Q., 666
Benson, T. M. See Odri, P., 757
Bernhard, J. T.
—; Joines, W. T.: Microwave Bandpass Filters Using Series-Cascaded Sections of Microstrip Line, 177
Betti, S.
—; De Marchis, G.; Iannone, E.; Pietroselli, M.: Response to "New Receiver Scheme for Homodyne and Intradyne Satellite Optical Links," 46
—; De Marchis, G.; Iannone, E.: A Novel Direct-Detection Optical Transmission System Based on Polarization Modulation, 367
Bhasin, K. B. See Valco, G. J., 234
See Richard, M. A., 257
See Toncich, S. S., 372
Bhattacharyya, A. (Arun) K.
Radiation Efficiency and the Gain of a Source Inside a Two-Layered Grounded Dielectric Structure, 439
Bhattacharyya, A. See Karmakar, N. C., 115
Bhattacharyya, A. (Asoke) K.
—; Burke, G. J.; Miller, E. K.: Modeling Wire Dipoles in an Infinite Chiral Medium and Vertically Oriented Near a Chiral Half Space, 101
See Kahler, B. D., 524
Bi, Z. See Shen, Y., 261
Bialkowski, M. E. See Karmaker, N. C., 447
Bian, J.
—; Chan, A. K.: The Design of an All-Optical Spatial Soliton Switch in a Lossy Nonlinear Medium, 433
Blemker, A. R. See Valco, G. J., 234
Bois, P. See Vanbesien, O., 351
Boix, R. R. See Martel, J., 411
Bokhari, S. A. See Bonvin, F., 347
Bonvin, F.
—; Bokhari, S. A.; Zurcher, J. F.; Gardiol, F. E.: Microstrip Spatial Filters for the H-Plane Pattern Control of Microstrip Antennas, 347
Boonzaaier, J. J.
—; Pistorius, C. W. I.: Radiation and Scattering by Thin Wires with a Dielectric Coating—A Finite Difference Time-Domain Approach, 288
Boothroyd, S. A. See Shimura, T., 647
Bosisio, R. G. See Le, D. L., 403
See Hajji, R., 580
See Xu, Y., 615
Bourdel, E.
—; Delacressonniere, B.; Gautier, J. L.; Josse, C.; Pouvil, P.: Microwave Monolithic Analogue Frequency Divider with GaAs HEMT, 721
Boussouis, M. See Essaaidi, M., 141, 537
Burch, J. F., 722
Burke, G. J. See Bhattacharyya, A. K., 101
Buss, T. F. See de Maagt, P. J., 295

Microwave and Optical Technology Letters
Author Index to Volume 5

Aanandan, C. K. See Ajaikumar, V., 557
See Dey, S., 709
Abdallah, E. A. See Mitkess, A. A., 130
Abiri, H. See Bakhtazad, A., 643
Abouzahra, M. D.
Comments on "A Simple Approach to a Four-Way Hybrid Ring Power Divider Design," 154
Abul-Shohoud, W. H. See Fares, D. A., 269
Abushagur, M. A. G. See Helaly, A., 633
Agarwal, A.
—; Kakatkar, S. S.; Sarkar, B. K.: Design, Analysis, and Development of a High Power, Low-Loss Lumped Coupler for VHF Applications, 240
Ajaikumar, V.
—; Jose, K. A.; Aanandan, C. K.; Mohanan, P.; Nair, K. G.: Backscattering Reduction of Corner Reflectors Using SCS Technique, 557
Ajaikumar, V. See Gomez, L. W., 171
Alam, M. S.
—; Karim, M. A.: Programmable Optical Perfect Shuffle Interconnection Network Using Fredkin Gates, 330
—; Karim, M. A.: Enhanced Correlation Discrimination Using Binary Joint Transform Correlation with Feedback, 752
Albinsson, B.
—; Schoon, M.: A Novel Amplifier Combining High Gain, Output Power, and Efficiency, 166
Allamando, E. A.
X-Band MMIC Voltage-Controlled Oscillator Using HEMTs, 395
Andrenko, A. S.
—; Nosich, A. I.: H-Scattering of Thin-Film Modes from Periodic Gratings of Finite Extent, 333
Arora, R. K.
—; Mongia, R. K.: Simple Expressions for Diffraction Loss in Open Resonators, 401
Arrizon, V.
—; Ojeda-Castaneda, J.: Phase Grating: Analytical Formulas for the Near Field, 483
See Ojeda-Castaneda, J., 429
Asensio, A.
—; Perez, F.: High-Power Microwave Bipolar Transistor Modeling, 10
Awwal, A. A. S. See Cherri, A. K., 279

Bahl, I. J.
—; Griffin, E. L.: Low Loss Electronically Tunable Bandpass Filters on the GaAs Substrate, 328
Bakhtazad, A.
—; Abiri, H.; Rahnavard, M. H.: Tapered Corrugation for Improving Characteristics of DFB and DBR Lasers, 643
Bangert, A. See Romero, M. A., 38
Barbosa, A. M. See Topa, A. L., 602
Beker, B. See Chen, Y., 275, 469
See Ho, T. Q., 666
Benson, T. M. See Odri, P., 757
Bernhard, J. T.
—; Joines, W. T.: Microwave Bandpass Filters Using Series-Cascaded Sections of Microstrip Line, 177
Betti, S.
—; De Marchis, G.; Iannone, E.; Pietroselli, M.: Response to "New Receiver Scheme for Homodyne and Intradyne Satellite Optical Links," 46
—; De Marchis, G.; Iannone, E.: A Novel Direct-Detection Optical Transmission System Based on Polarization Modulation, 367
Bhasin, K. B. See Valco, G. J., 234
See Richard, M. A., 257
See Toncich, S. S., 372
Bhattacharyya, A. (Arun) K.
Radiation Efficiency and the Gain of a Source Inside a Two-Layered Grounded Dielectric Structure, 439
Bhattacharyya, A. See Karmakar, N. C., 115
Bhattacharyya, A. (Asoke) K.
—; Burke, G. J.; Miller, E. K.: Modeling Wire Dipoles in an Infinite Chiral Medium and Vertically Oriented Near a Chiral Half Space, 101
See Kahler, B. D., 524
Bi, Z. See Shen, Y., 261
Bialkowski, M. E. See Karmaker, N. C., 447
Bian, J.
—; Chan, A. K.: The Design of an All-Optical Spatial Soliton Switch in a Lossy Nonlinear Medium, 433
Blemker, A. R. See Valco, G. J., 234
Bois, P. See Vanbesien, O., 351
Boix, R. R. See Martel, J., 411
Bokhari, S. A. See Bonvin, F., 347
Bonvin, F.
—; Bokhari, S. A.; Zurcher, J. F.; Gardiol, F. E.: Microstrip Spatial Filters for the H-Plane Pattern Control of Microstrip Antennas, 347
Boonzaaier, J. J.
—; Pistorius, C. W. I.: Radiation and Scattering by Thin Wires with a Dielectric Coating—A Finite Difference Time-Domain Approach, 288
Boothroyd, S. A. See Shimura, T., 647
Bosisio, R. G. See Le, D. L., 403
See Hajji, R., 580
See Xu, Y., 615
Bourdel, E.
—; Delacressonniere, B.; Gautier, J. L.; Josse, C.; Pouvil, P.: Microwave Monolithic Analogue Frequency Divider with GaAs HEMT, 721
Boussouis, M. See Essaaidi, M., 141, 537
Burch, J. F., 722
Burke, G. J. See Bhattacharyya, A. K., 101
Buss, T. F. See de Maagt, P. J., 295

Camacho-Penalosa, C.
—; Martin-Funke, E.: On the Harmonic Balance Analysis of Almost-Periodic Autonomous Nonlinear Circuits with Dynamic Nonlinear Characteristics, 35
Cayrou, J. C.
—; Gayral, M.; Tronche, C.; Pouysegur, M.; Graffeuil, J.; Sautereau, J. F.: Optimum Design of MESFET Mixers Using a Quasianalytical Technique, 695
Chakraborty, A. See Raju, G. S. N., 26
Chan, A. K. See Bian, J., 433
Chang, H. C. See Chen, T. J., 188
Chang, K. See Gopalakrishnan, G. K., 76
See Luong, G. M., 388
See Magerko, M. A., 748
Chang, W. C.
—; Chuang, W. C.; Wang, W. S.: Lithium Biobate Traveling-Wave Phase Modulator with an Indium Tinoxide Buffer Layer, 218
—; Chuang, W. C.; Wang, W. S.: Analysis of the Coupling Characteristics of a Three-Guide Coupler with Symmetric Tuning, 563
See Chuang, W. C., 542
Chao, F.-L.
—; Wang, W. S.: The Finite-Element Analysis of Slider-Induced Convection in Two-Phase LPE Growth System, 16
Chassay, G. See Desclos, L., 621
Chebolu, S. R. See Huynh, T., 572
Chen, C. See Lin, S., 72, 659
Chen, J. A. See Chuang, W. C., 542
Chen, R.
—; Sun, M.; Li, X.: Millimeter-Wave Injected-Lock Frequency Dividers, 398
Chen, T. J.
—; Chang, H. C.: Radiation from Dielectric Waveguide Step Discontinuities—A Bounded Approach, 188
Chen, T. K. See Toncich, S. S., 372
Chen, Y.
—; Beker, B.: Dispersion Characteristics of Open Microstrip Transmission Lines Printed on Biaxially Anisotropic Substrates, 275
—; Beker, B.: Full-Wave Analysis of Open Microstrip Transmission Lines Printed on Anisotropic Substrates with a Protective Layer, 469
Chen, Y. K. See Liaw, J. W., 118
Chen, Z.
—; Tsang, L.: Polarimetric Signatures of a Layer of Nonspherical Discrete Scatterers Overlying a Homogeneous Half-Space Based on Full Multiple Scattering Vector Radiative Transfer Theory, 520
Cheng, D.
—; Xue, L.: Dipole Radiation in the Presence of a Grounded Chiral Slab, 65
—; Cheng, J.; Xue, L.: Radiation of Elementary Dipole Sources in Stratified Chiral Media, 135
—; Cheng, J.; Xue, L.: Corrections to "Radiation of Elementary Dipole Sources in Stratified Chiral Media," 545
Cheng, J. See Cheng, D., 135, 545
Cherri, A. K.
—; Awwal, A. A. S.: Accurate Gaussian Laser Beam Diameter Measurement Using Exponential and Rectified Sinusoidal Rulings, 279
Chew, W. C.
—; Lu, C.: A Recursive Algorithm to Compute the Wave-Scattering Solution of a Finite-Strip Array Using an Efficient Plane-Wave Basis, 146
Chiba, O. See Kashiwa, T., 486
Chive, M. See Dubois, L., 679
Cho, Y. K.
—; Hwang, O. H.; Lee, K. E.: Theoretical and Experimental Study on the Linear Microstrip Patch Antenna Array Technique Using E-Plane Gap Coupling, 88
Christodoulou, C. G. See Wahid, P. F., 7
Chrostowski, J. See Shimura, T., 647
Chu, C. Y. J. See Ghafouri-Shiraz, H., 152
Chu, T. H. See Yu, C. C., 576
Chuang, W. C.
—; Chang, W. C.; Chen, J. A.; Lee, W. Y.: A Novel Method for Measuring the Aluminum Concentration in Al_xGa_{1-x} As Alloy System, 542
See Chang, W. C., 218, 563
Chun, J. C. See Park, W. S., 313
Chung, P. S. See Pun, E. Y. B., 490
Citerne, J. See Tessereau, S., 265
Claspy, P. C. See Richard, M. A., 257
See Toncich, S. S., 372
Clayton, M. See Elmirghani, J., 739
Cloete, J. H.
—; Smith, A. G.: The Constitutive Parameters of a Lossy Chiral Slab by Inversion of Plane-Wave Scattering Coefficients, 303
Coccioli, R. See Pelosi, G., 513
Colef, G.
Bandwidth Extension for Six-Port Reflectometers via a Simple Numerical Method, 374
Conforti, E.
Dual-Mode Tunable Semiconductor Laser with a Grating–Grating External Cavity, 427
Costamagna, E.
Capacitance of Rectangular Lines with Cross Inner Conductor, Considering Angular Offset between Conductors, Side Magnetic Walls, and Off-Centered Inner Conductor, 553
Cresson, P. Y. See Dubois, L., 679
Cryan, R. See Elmirghani, J., 739
Cui, T. J.
—; Liang, C. H.: Application of the Network Theory on One-Dimensional Inverse Scattering, 746

Davis, R. See Lee, C. S., 92
de Castro Lima, A. C.
—; Descardeci, J. R.; Giarola, A. J.: Circular Microstrip Antenna on a Spherical Surface, 221
Delacressonniere, B. See Bourdel, E., 721

de Maagt, P. J.
—; Buss, T. F.; van de Roer, T. G.: Temperature Dependence of Schottky Versus Backward Diodes for Radiometry Applications, 295
De Marchis, G. See Betti, S., 46, 367
Descardeci, J. R. See de Castro Lima, A. C., 221
Desclos, L.
—; Chassay, G.; Pouliguen, P.: A New Differential Calibration for Radar Cross-Section Measurements, 621
See Pouliguen, P., 653
Dey, K. K. See Misra, V. C., 246
Dey, S.
—; Aanandan, C. K.; Jose, K. A.; Moganan, P.; Nair, K. G.: Wideband Microstrip Dipole, 709
Ding, C. See Shi, Z., 267
Drake, E.
—; Medina, F.; Horno, M.: Quasi-TEM Analysis of Thick Multistrip Lines Using an Efficient Iterative Method, 530
Dressel, E. M. See Lawson, C. M., 157
Dubois, L.
—; Cresson, P. Y.; Pribetich, J.; Chive, M.: Analysis of Microstrip-Microslot Applicator for Biomedical Applications, 679
Duenas-Jimenez, A.
—; Serrano-Santoyo, A.; Mendieta, F. J.: On the Synthesis of Some Ring Junctions for Six-Port Measurement Applications, 559

East, J. R. See Livernois, T. G., 661
Elmirghani, J.
—; Cryan, R.; Clayton, M.: Frame Synchronization of Optical Fiber DPPM with Dispersed Pulse Shapes, 739
El-Sheikh, A. N. A.
—; Langley, R. J.: General Solution for a Multiport Network, 668
Elsohly, A. A. See Mitkess, A. A., 130
See Hindy, M. A., 742
Engheta, N. See Pelet, P., 31
See Saadoun, M. M. I., 184

Essaaidi, M.
On the Rigorous Mode Identification Techniques in the Shielded MICs, 704
—; Boussouis, M.: Comparative Study of the Galerkin and the Least-Squares Boundary Residuals (LSBR) Methods for the Analysis of Microwave Integrated Circuits (MICs), 141
—; Boussouis, M.: A Modified Least-Squares Boundary Residual Method for the Rigorous Analysis of MICs, 537

Fan, Z.
—; Lee, K. F.: Input Impedance of Rectangular Microstrip Antennas with a Dielectric Cover, 123
—; Lee, K. F.: Spectral Domain Analysis of Rectangular Microstrip Antennas with an Air Gap, 315
—; Lee, K. F.: Input Impedance of Circular-Disk Microstrip Antennas with a Dielectric Cover, 701
Fares, D. A.
How Does Atmospheric Turbulence Affect Threshold Detection in Optical Channels?, 138
—; Abul-Shohoud, W. H.; Raslan, N. A.; Nassef, M. A.: δ_{max} Detection of Multipulse Signaling in Noisy Optical Channels, 269
—; Raslan, N. A.; Kaseb, H. M.: Threshold Detection of a Quadruple Pulse Signaling in Noisy Optical Channels, 503
Fernandes, A. S. C. See Neves, I. V., 675
Finn, G. M. See Lawson, C. M., 157
Floc'h, J. M. See Tessereau, S., 265
Fralich, R. See Wang, J., 155
Freni, A. See Pelosi, G., 513
Frickey, D. A.
Calculation of S Parameters from ABCD Parameters with Complex Normalizing Impedances, 613
Fukai, I. See Kashiwa, T., 486

Gallego, J. D. See Garde, M. J., 453

Gao, Y.
Influence of the Drawing Ratio and the Relative Index Difference on Propagation Characteristics in Single-Mode Fibers with Arbitrary Refractive Index Profile, 161
Garde, M. J.
—; Sebastian, J. L.; Pintado, J. M.; Gallego, J. D.: A Compact and Stable Acousto-Optical Spectrometer, 453
Gardiol, F. E. See Bonvin, F., 347
Gautier, J. L. See Zhang, G. F., 381
See Bourdel, E., 721
Gayral, M. See Cayrou, J. C., 695
Georgopoulos, C. J.
—; Prentzas, L. K.: Signal Power Requirements in Indoor Directive and Diffuse Infrared Communication Channels, 148
Ghafouri-Shiraz, H.
—; Chu, C. Y. J.: Refractive Index Control on the Polarization Sensitivities of Semiconductor Traveling-Wave Laser Amplifiers, 152
—; Shum, P.: Simulation of the Erbium-Doped Fiber Amplifier Characteristics, 191
Ghannouchi, F. M. See Hajji, R., 580
See Le, D. L., 403
Giarola, A. J. See de Castro Lima, A. C., 221
Goel, A. K.
—; Wei, X.: Determination of the Transverse Delays in the GaAs/AlGaAs MODFETS, 408
Gomez, L. W.
—; Ajaikumar, V.; Jose, K. A.; Mohanan, P.; Nair, K. G.: A Broadband Dual Slant Strip Grating for Elimination of Specular Reflection of EM Waves, 171
Gopalakrishnan, G. K.
—; Chang, K.: Study of Slits in Microstrip Ring Resonators for Microwave and Optoelectronic Applications, 76
Gottumukkala, K. R. See Raju, G. S. N., 26
Gottwald, P. See Riesz, F., 112
Graf, U. U. See Moore, J., 480
Graffeuil, J. See Cayrou, J. C., 695
Griffin, E. L. See Bahl, I. J., 328

Habli, M. A.
—; Leonik, K.: Image Reconstruction for Computer Tomography Using the Bimodal Optical Computer, 125
Hajji, R.
—; Ghannouchi, F. M.; Bosisio, R. G.: Large-Signal Microwave Transistor Modeling Using Multiharmonic Load-Pull Measurements, 580
Hall, P. S.
Dual Circularly Polarized Sequentially Rotated Microstrip Array with High Isolation, 236
Hamdy, S. M. See Mitkess, A. A., 130
Hansen, R. C.
Hansen–Woodyard Arrays with Few Elements, 44
Harada, H. See Takenaka, T., 94
Harmony, D. W. See Lawson, C. M., 157
Harrington, R. F. See Hsu, C-I. G., 318
Hau, J.
—; Wang, Z. L.; Lin, W. G.: Coherent Inelastic Scattering by an Arbitrary Body Uniformly Filled with Active Molecules, 606
He, A. See Zhang, J., 321
Helaly, A.
—; Abushagur, M. A. G.: Acousto-Optic Wavelength Division Multiplexing System, 633
Herben, M. H. A. J. See Leyten, L., 49
Herczfeld, P. R. See Romero, M. A., 38
Hilton, R. See Jackson, C. M., 722
Hindy, M. A.
—; Mitkess, A. A.; Elsohly, A. A.: Application of Convolution Approach for Microstrip Lines on Ferrite Substrate, 742
Ho, K. P. See Tsao, H. W., 4
Ho, T. Q.
—; Beker, B.: Effects of Substrate Anisotropy on Coupled Bilateral Fin Lines, 666
Holzman, E. L.
A Ka-Band Low-Noise Hybrid Amplifier, 1
Hong, S.
—; Ra, J.; Kim, S.: Electromagnetic Coupling to a Nonuniform Transmission Line Consisting of Two Angled Wires, 736
Horno, M. See Martel, J., 411
See Drake, E., 530
Hosain, S. I.
—; Meunier, J. P.: A New Characterization Method for Few-Moded Optical Fibers, 509
Hsu, C. I. G.
—; Harrington, R. F.; Michalski, K. A.; Zheng, D.: On the Mode Spectrum of a Parallel-Plate Waveguide Filled with a Two-Layer Uniaxial Medium, 318
Hu, R. See Jackson, C. M., 722
Huang, C.
—; Nevels, R. D.: A Closed-Form Multidimensional Free-Space Green's Function by the Path-Integral Method, 225
Huang, J.
A Parallel Series-Fed Microstrip Array with High Efficiency and Low Cross-Polarization, 230
Huret, F.
—; Kennis, P.; Pribetich, P.: Combined Effects of Microstrip Width and Substrate Height on Complex Mode Frequency Range, of Boxed Microstrip Lines, 635
Huynh, T.
—; Lee, K. F.; Chebolu, S. R.; Lee, R. Q.: Mutual Coupling between Rectangular Microstrip Patch Antennas, 572
Hwang, O. H. See Cho, Y. K., 88

Iannone, E. See Betti, S., 46, 367
Ikegaya, M. See Yamauchi, J., 251
Iwakura, H.
Balun Networks Using Coupled-Line Structures, 159

Ja, Y. H.
Vernier Fiber Double-Ring Resonator Using Degenerate Two-Wave Mixing, 181
Jackson, C. M.
—; Kobayashi, J. H.; Lee, A.; Pettiette-Hall, C.; Burch, J. F.; Hu, R.; Hilton, R.; McDade, J.: Novel Monolithic Phase Shifter Combining Ferroelectrics and High Temperature Superconductors, 722
Jacobs, J. P.
—; McNamara, D. A.: Theoretical Evidence for the Near-Cosinusoidal Electric Field Distribution of Edge Slots in Rectangular Waveguide, 686
Jaffe, D. T. See Moore, J., 480
Jaggard, D. L.
—; Sun, X.; Liu, J. C.: On the Chiral Riccati Equation, 107
—; Spielman, T.: Triadic Cantor Target Diffraction, 460
Janaswamy, R.
2-D Radiation Boundary Conditions on an Arbitrary Outer Boundary, 393
Jecko, B. See Sekhar Roy, J., 228
See Vaudon, P., 649
Jecko, F. See Sekhar Roy, J., 228, 361
See Reineix, A., 685
Jeng, J. Y.
—; Wang, W. S.: Special Consideration on the Design of a *Y*-Junction Optical Waveguide, 592
—; Tsui, C. L.; Wang, W. S.: Process-Induced Lateral Asymmetry of a *Y* Junction, 638
Jeng, S. K.
—; Lee, S. W.: Thin-Film Boundary Conditions, 682
Jiang, P. See Zhang, X., 442
Joines, W. T. See Bernhard, J. T., 177
Jones, S. H.
—; Tait, G. B.; Shur, M.: Modulated-Impurity-Concentration Transferred-Electron Devices Exhibiting Large Harmonic Frequency Content, 354
Jose, K. A. See Gomez, L. W., 171
See Ajaikumar, V., 557
See Dey, S., 709
Josse, C. See Bourdel, E., 721
Ju, K. M. See Yu, C. C., 477

Kahler, B. D.
—; Bhattacharyya, A. K.: Physical Optics and GTD Time-Domain Scattering from a Finite PEC Cylinder with One End Open and One End Closed, 524

Kakatkar, S. S. See Agarwal, A., 240
Karim, M. A. See Alam, M. S., 330, 752
Karmakar, N. C.
—; Bhattacharyya, A.: Electromagnetically Coupled Patch Antenna-Theoretical and Experimental Investigations, 115
—; Bialkowski, M. E.: Experimental Investigations into an Electromagnetically Coupled Microstrip Patch Antenna, 447
Kaseb, H. M. See Fares, D. A., 503
Kashiwa, T.
—; Chiba, O.; Fukai, I.: A Formulation for Surface Impedance Boundary Conditions Using the Finite-Difference Time-Domain Method, 486
Kaye, M.
—; Pasala, K. M.; Reuster, D.: On the Linear Independence of Testing Functions Used in the Method of Moments, 590
Kennis, P. See Kinowski, D., 369
See Huret, F., 635
Kikuchi, K.
Broad-Band Millimeter-wave Detector Using Dielectric Image Line, 239
Kim, B. M. See Park, W. S., 313
Kim, S. See Hong, S., 736
Kim, S. G.
—; Suh, K. W.; Ra, J. W.: Improved Born Inversion for Frequency-Swept Microwave Imaging of Dielectric Cylinder, 340
See Suh, K. W., 194
Kim, S. Y. See Suh, K. W., 194
Kinowski, D.
—; Pribetich, P.; Kennis, P.: Finite-Element Analysis of Superconducting Microstrip Line for MMIC Applications, 369
Kobayashi, J. H. See Jackson, C. M., 722
Koivisto, P. K. See Oksanen, M. I., 68
Kooi, P. S.
—; Tran, V. N.; Leong, M. S.; Yeo, T. S.: Microwave Complex Permittivity of Rainwater in the 26–40-GHz Band, 198
Kubo, H.
Leakage Characteristics of the Cylindrical Dielectric Waveguide with a Periodically Varying Radius, 718
Kumazawa, I. See Lin, S., 493
Kuo, C. C. See Lee, Y. H., 168
Kwok, S. C.
Analysis of a Monopole in a Substrate, 691

Lagerholm, R.
Study of Metallic Strip Gratings for Frequency Scanning, 713
Lakhtakia, A.
Plane Wave Scattering Response of a Unidirectionally Conducting Screen-Immersed in a Bi-Isotropic Medium, 163
Errata for "Plane Wave Scattering Response of a Unidirectionally Conducting Screen Immersed in a Bi-Isotropic Medium," 476
Langley, R. J. See El-Sheikh, A. N. A., 668
Lau, C. S.
—; Wei, P. K.; Su, C. W.; Wang, W. S.: Fabrication of Strip Loaded Outdiffusion Guides on Lithium Niobate Substrate, 309
—; Liu, S. F.; Wei, P. K.; Wang, W. S.: A Mach-Zehnder Interferometer Made of Strip-Loaded Outdiffusion Guide, 611
Lawson, C. M.
—; Michael, R. R.; Finn, G. M.; Dressel, E. M.; Harmony, D. W.: Measurements of the Minimum Reflection Signature of PMMA Fiber Splices, 157
Le, D. L.
—; Channouchi, F. M.; Bosisio, R. G.: A Novel Approach for Designing GaAs FET Frequency Multipliers with Optimum Conversion Gain and Power Efficiency, 403
Lee, A. See Jackson, C. M., 722
Lee, C. S.
—; Lee, S. W.; Davis, R.; Tsui, J.: Perforated Dielectric Lens, 92
Lee, K. E. See Cho, Y. K., 88
Lee, K. F. See Fan, Z., 123, 315, 701
See Huynh, T., 572
Lee, K. S.
—; Ra, J. W.: Angular Spectral Inversion for Reconstruction of Complex Permittivity Profiles, 359
Lee, K. Y.
—; Wang, W. S.: Non-Gaussian Beams in Direct Coupling from Laser Diodes into Optical Waveguides via Small Gaps, 99
Lee, R. Q. See Simons, R. N., 60
See Richard, M. A., 257
See Simons, R. N., 420
See Huynh, T., 572
Lee, S. W. See Lee, C. S., 92
See Jeng, S. K., 682
Lee, W. Y. See Chuang, W. C., 542
Lee, Y. H.
—; Kuo, C. C.; Tsao, H. W.: Impact of Local Oscillator Intensity Noise on the Performance of the Optical Phase-Diversity FSK Receiver Using Delay-and-Multiplying Discriminator, 168
See Tsao, H.-W., 4
Legay, H. See Tessereau, S., 265
Leong, M. S. See Kooi, P. S., 198
Leonik, K. See Habli, M. A., 125
Leyten, L.
—; Herben, M. H. A. J.: Vectorial Far-Field Analysis of the Fresnel-Zone Plate Antenna: A Comparison with the Parabolic Reflector Antenna, 49
Li, D.
—; Wang, R.: Analysis of Waveguide-to-Microstrip Transition, 128
Li, X. See Chen, R., 398
Lian, H. X.
—; Stapleton, S.: The TM Mode in the Self-Focusing Dielectric Planar Waveguide, 496
Liang, C. H.
—; Xie, Y. J.: The Accurate Variational Analysis for the Measurement of the Complex Dielectric Constant of a Sample Rod Inserted in a Cavity, 209
See Cui, T. J., 746
Liaw, J. W.
—; Chen, Y. K.: Novel Configuration of Transmissive Active Star Couplers Using Minimum Erbium-Doped Fibers and Pump Lasers, 118

Lin, S.
—; Chen, C.: Optoelectronic Chip Implementation of a Bipolar Quadratic Associative Memory, 72
—; Kumazawa, I.; Wu, J.: Optical Chip Implementation of Cellular Automata, 493
—; Zhing, S.; Chen, C.; Liu, R.; Wu, J.: Optical Fuzzy Logic Array Using Shadow Casting, 659
Lin, W.
A New Type of Coaxial Line of Rectangular and Oval Cylinders with Constant Electric Intensity on the Latter Cylinder, 19
Further Study on the Characteristics of a Rectangular Line with Off-Centered Strip Inner Conductor, 62
A New Identity in Jacobian Function and Its Application, 86
See Yu, Z., 201
See Wen, G., 337
See Qiu, C. M., 474
See Hau, J., 606
See Yuan, N., 506
Lindamood, G. R. See Simons, R. N., 60
Lindell, I. V.
—; Sihvola, A. H.; Viitanen, A. J.: Plane-Wave Reflection from a Bi-Isotropic (Nonreciprocal Chiral) Interface, 79
On the Reciprocity of Bi-Isotropic Media, 343
See Sten, J. C. E., 597
See Viitanen, A. J., 729
Ling, H. See Moore, J., 480
Lippens, D. See Vanbesien, O., 351
Litva, J. See Shen, Y., 261
Liu, D. See Wu, H., 423
Liu, H. X. L.
—; Sjogren, L. B.; Luhmann, N. C., Jr.: Grid Bandpass Filters for Quasioptical Frequency Multiplier Array Application, 547
See Sjogren, L. B., 623
Liu, J. C. See Jaggard, D. L., 107
Liu, L. See Zhou, C., 673
Liu, R. See Lin, S., 659
Liu, S. F.
—; Wei, P. K.; Wang, W. S.: A New Approach to the Analysis of the Soliton: Nonuniform Finite Difference Beam Propagation Method, 284
—; Wang, W. S.: Excitation of Three-Dimensional Solitary Waves from a Nonlinear Slab Waveguide, 517
See Lau, C. S., 611
Livernois, T. G.
—; East, J. R.: Analysis of a Microstrip Step Discontinuity Fabricated on a Metal-Insulator-Semiconductor (MIS) Substrate, 661
Lo, Y. T. See Ramahi, O. M., 254
Loi, K. K. See Pun, E. Y. B., 490
Lu, C. See Chew, W. C., 146
Luhmann, N. C., Jr. See Liu, H. X. L., 547
See Sjogren, L. B., 623
Luong, G. M.
—; Chang, K.: Analysis and Development of a Broadband Interconnect for Microstrip Lines, 388
Lyons, B. N. See O'Ciardha, T. E., 292

Magerko, M. A.
—; Chang, K.: Modelling of Gunn Domain Effects in the Output Conductance of the High-Frequency Small-Signal GaAs MESFET Equivalent Circuit, 748
Mahapatra, S. See Samuel, M., 260
See Patil, K. D., 727
Maiti, S. K. See Patil, K. D., 727
Malherbe, J. A. G. See van Rensburg, D. J. J., 326
Maloney, J. G.
—; Smith G. S.: Optimization of Pulse Radiation from a Simple Antenna Using Resistive Loading, 299
Marincic, A.
—; Miletic, D.: Calculation of Parameter Tolerances of Near-Zero Dispersion Step-Index Fiber for a Specified Bandwidth, 273
See Odri, P., 757
Martel, J.
—; Boix, R. R.; Horno, M.: Design Parameters of Asymmetric Edge-Coupled Microstrip Open-End Discontinuities, 411
Martin-Funke, E. See Camacho-Penalosa, C., 35
Masotti, D. See Rizzoli, V., 534
Mastri, F. See Rizzoli, V., 534
Matera, F.
—; Romagnoli, M.; Settembre, M.; Tamburrini, M.: Proposal of a High-Capacity All-Optical TDMA Network, 41
McDade, J. See Jackson, C. M., 722
McGinn, V. P.
—; Smith, B. C.: Photoconductors as Dynamic Memory Elements, 215
McNamara, D. A. See van Rensburg, D. J. J., 326
See Jacobs, J. P., 686
Medina, F. See Drake, E., 530
Mendieta, F. J. See Duenas-Jimenez, A., 559
Meunier, J. P. See Hosain, S. I., 509
Michael, R. R. See Lawson, C. M., 157
Michalski, K. A. See Hsu, C-I. G., 318
Miletic, D. See Marincic, A., 273
Miller, E. K. See Bhattacharyya, A. K., 101
Misra, V. C.
—; Pal, R.; Dey, K. K.: Broadband Horizontally Polarized OMNI Antenna, 246
Mitkess, A. A.
—; Abdallah, E. A.; Hamdy, S. M.; Elsohly, A. A.: Characteristic Features of a Leaky-Wave Microstrip Antenna on Cylindrical Surfaces, 130
See Hindy, M. A., 742
Mo, Y. See Zhou, C., 673
Mohanan, P. See Gomez, L. W., 171
See Ajaikumar, V., 557
See Dey, S., 709
Monediere, T. See Reineix, A., 685
Mongia, R. K. See Arora, R. K., 401
Moore, J.
—; Ling, H.: Graf, U. U.; Jaffe, D. T.: A Boundary Integral Approach to the Scattering from Periodic Gratings, 480
Morgan, G. B. See Tsang, K. F. 516

Nagle, J. See Vanbesien, O., 351
Nair, K. G. See Gomez, L. W., 171
See Ajaikumar, V., 557
See Dey, S., 709
Nakano, H. See Yamauchi, J., 251
Nassef, M. A. See Fares, D. A., 269
Nawarange, A. See Samuel, M., 260
Nemeth-Sallay, M. See Riesz, F., 112
Neri, A. See Rizzoli, V., 534
Nevels, R. D. See Huang, C., 225
Neves, I. V.
—; Fernandes, A. S. C.: Wave Propagation in a Radially Inhomogeneous Cylindrical Dielectric Structure: A General Analytical Solution, 675
Nishimoto, C. K. See Riaziat, M. L., 211
Nosich, A. I. See Andrenko, A. S., 333

O'Ciardha, T. E.
—; Lyons, B. N.: Modal Analysis of Coaxial Structures, 292
Odri, P.
—; Marincic, A.; Benson, T. M.: Application of a New Simple Method for the Analysis of Eccentric Coaxial Waveguides with a Homogeneous Dielectric, 757
Ojeda-Castaneda, J.
—; Arrizon, V.: Synthesis of 1-D Phase Profiles with Variable Optical Path, 429
See Arrizon, J., 483
Oksanen, M. I.
—; Koivisto, P. K.; Tretyakov, S. A.: Plane Chiral Waveguides with Boundary Impedance Conditions, 68
Ozsoy, S. See Shiraz, H. G., 22

Paiva, C. R. See Topa, A. L., 602
Pal, R. See Misra, V. C., 246
Pan, C. See Wu, H., 423
Park, W. S.
—; Chun, J. C.; Kim, B. M.: Determination of the Permittivity and Permeability of Microwave Resonators Using Two Resonant Modes, 313
Pasala, K. M. See Kaye, M., 590
Pascher, W. See Pregla, R., 474, 476
Patil, K. D.
—; Maiti, S. K.; Mahapatra, S.: Multilayered Dielectric Stripline, 727
Pedro, J. C.
—; Perez, J.: Complete Characterization of MESFET I_{ds} Nonlinearities for Intermodulation Analysis, 377
Pelet, P.
—; Engheta, N.: Novel Rotational Characteristics of Radiation Patterns of Chirostrip Dipole Antennas, 31
Pelosi, G.
—; Freni, A.; Cocciolo, R.: Appropriate Boundary Conditions for Applying the FEM to the Analysis of Scattering from Periodic Structures Embedded in a Stratified Medium, 513
Perez, F. See Asensio, A., 10
Perez, J. See Pedro, J. C., 377
Perl, T. D. See Simons, R. N., 420
Pettiette-Hall, C. See Jackson, C. M., 722
Pietroselli, M. See Betti, S., 46
Pintado, J. M. See Garde, M. J., 453
Pistorius, C. W. I. See Boonzaaier, J. J., 288
Pouliguen, P.
—; Desclos, L.: An Application of Physical Optics for Near-Field Mono- or Bistatic Diffraction Calculations, 653
See Desclos, L., 621
Pouvil, P. See Bourdel, E., 721
Pouysegur, M. See Cayrou, J. C., 695
Pregla, R.
—; Pascher, W.: Comment on "The Recurrence Matrix Technique for the Arbitrary Millimeter-Wave and Microwave Planar Transmission Lines," 474
—; Pascher, W.: Second Comment on "The Recurrence Matrix Technique for the Arbitrary Millimeter-Wave and Microwave Planar Transmission Lines," 476
Prentzas, L. K. See Georgopoulos, C. J., 148
Pribetich, P. See Kinowski, D., 369
See Huret, F., 635
See Dubois, L., 679
Prince, J. L. See Voranantakul, S., 306
Pun, E. Y. B.
—; Chung, P. S.; Loi, K. K.: Annealing Effects on Proton-Exchanged $LiNbO_3$ Optical Waveguides Using Stearic Acid, 490
Puri, V.
Effect of Metallization Process on the Performance of Passive Microstripline Circuits, 585

Qiu, C. M.
—; Ren, W.; Lin, W.: Reply of Authors of "The Recurrence Matrix Technique for the Arbitrary Millimeter-Wave and Microwave Planar Transmission Lines," 474

Ra, J. See Hong, S., 736
Ra, J. W. See Suh, K. W., 194
See Kim, S. G., 340
See Lee, K. S., 359
Rahnavard, M. H.
—; Rusch, W. V. T.: Comparison of the Slope of the Field at the Reflection Boundary of an Edge-Induced and Surface-Curvature-Induced Microwave Shadows, 81
See Bakhtazad, A., 643
Raju, G. S. N.
—; Rao, P. M.; Gottumukkala, K. R.; Chakraborty, A.: Investigations on Arrays of Nonidentical Radiators, 26
Ramahi, O. M.
—; Lo, Y. T.: Superstrate Effect on the Resonant Frequency of Microstrip Antennas, 254
Rao, P. M. See Raju, G. S. N., 26
Raslan, N. A. See Fares, D. A., 269, 503
Reineix, A.
—; Monediere, T.; Jecko, F.: Ferrite Analysis Using the Finite-Difference Time-Domain (FDTD) Method, 685
See Sekhar Roy, J., 228
See Vaudon, P., 649
Ren, W. See Qiu, C. M., 474
Reuster, D. See Kaye, M., 590

Riaziat, M. L.
—; Nishimoto, C. K.: Compact Optically Triggered Microwave Pulse Generator, 211
Richard, M. A.
—; Bhasin, K. B.; Lee, R. Q.; Claspy, P. C.: Performance of a K-Band Superconducting Annular Ring Antenna, 257
Riesz, F.
—; Szentpali, B.; Gottwald, P.; Nemeth-Sallay, M.: A Novel MESFET-Compatible GaAs Optoelectronic Switch, 112
Ripoll, C. S. See Zhang, G. F., 381
Rizzoli, V.
—; Masotti, D.; Mastri, F.; Neri, A.: Noise Analysis of a Nonlinear Microwave Circuit Driven by a Noisy Sinusoidal Source, 534
Romagnoli, M. See Matera, F., 41
Romero, M. A.
—; Bangert, A.; Zhang, X.; Herczfeld, P. R.: Wavelength Dependence of the Optical Control of a HEMT Oscillator, 38
Correction to "Wavelength Dependence of the Optical Control of a HEMT Oscillator," 346
Ruan, C. See Wen, G., 337
See Yuan, N., 506
Rusch, W. V. T. See Rahnavard, M. H., 81
Russer, P. See Sattler, S., 566
Rutkowski, K. A. See Wahid, P. F., 7

Saadoun, M. M. I.
—; Engheta, N.: A Reciprocal Phase Shifter Using Novel Pseudochiral or Ω Medium, 184
Sadaune, V. See Vanbesien, O., 351
Samuel, M.
—; Nawarange, A.; Mahapatra, S.: S-Band Medium-Power MESFET Amplifier with High Stability, 260
Sangster, A. J. See Wang, H., 715
Sarkar, B. K. See Agarwal, A., 240
Sattler, S.
—; Russer, P.: On the Green's Function of the Transverse Scalar Potential and the Exact Evaluation of Its Corresponding Sommerfeld Integral, 566
Sautereau, J. F. See Cayrou, J. C., 695
Schoon, M. See Albinsson, B., 166
Sabastian, J. L. See Garde, M. J., 453
Sekhar Roy, J.
—; Vaudon, P.; Reineix, A.; Jecko, F.; Jecko, B.: Circularly Polarized Far Fields of an Axially Magnetized Circular Ferrite Microstrip Antenna, 228
—; Jecko, B.: A CAD Formula for Microstrip Dispersion, 361
Serrano-Santoyo, A. See Duenas-Jimenez, A., 559
Settembre, M. See Matera, F., 41
Shen, Y.
I; Bi, Z.; Wu, K.; Litva, J.: FD–TD Analysis of Open Cylindrical Dielectric Resonators, 261
Shi, Z.
Scale Factors of RCS for Lossy Targets, 325
—; Ding, C.: Effect of Imperfectly Conducting Surface of Scatter on Its Radar Cross Section, 267
Shimura, T.
—; Boothroyd, S. A.; Chrostowski, J.: Free-Carrier and Thermal Grating Effects in Gallium Phosphide, 647
Shiraz, H. G.
—; Ozsoy, S.: Analysis of Second Harmonic Generation in Organic Crystal-Cored Fibers for Various Cladding Materials, 22
Shum, P. See Ghafouri-Shiraz, H., 191
Shur, M. See Jones, S. H., 354
Sihvola, A. H. See Lindell, I. V., 79
Simons, R. N. —; Lee, R. Q.; Lindamood, G. R.: Electromagnetic Coupling between Coplanar Waveguide and Microstrip Antennas, 60
—; Perl, T. D.; Lee, R. Q.: New Coplanar Waveguide Feed Network for 2 × 2 Linearly Tapered Slot Antenna Subarray, 420
Simpson, T.
Open-Boundary Relaxation, 627
Sinha, M. P.
A Study on Broad-Banding the Tuning Ratio for Varactor-Tuned Oscillators, 671
Sjogren, L. B.
—; Liu, H. X. L.; Kuhmann, N. C., Jr.: A Polarization Approach for Quasioptical Phase Measurement, 623
See Liu, H. X. L., 547
Smith, A. G. See Cloete, J. H., 303
Smith, B. C. See McGinn, V. P., 215
Smith, G. S. See Maloney, J. G., 299
Spielman, T. See Jaggard, D. L. 460
Stapleton, S. See Lian, H. X., 496
Sten, J. C. E.
—; Lindell, I. V.: Electrostatic Image Theory for the Dielectric Sphere with an Internal Source, 597
Su, C. W. See Lau, C. S., 309
Suh, K. W.
—; Kim, S. G.; Kim, S. Y.; Ra, J. W.: Microwave Imaging for Dielectric Objects Under the Born Approximation Based on Projection, 194
See Kim, S. G., 340
Sun, M. See Chen, R., 398
Sun, X. See Jaggard, D. L., 107
Szentpali, B. See Riesz, F., 112

Tait, G. B.
Alloy Ramp Heterostructure Diodes for Microwave Mixer Applications, 417
See Jones, S. H., 354
Takenaka, T.
—; Harada, H.; Tanaka, M.: On a Simple Diffraction Tomography Technique Based on a Modified Newton–Kantorovich Method, 94
Tamburrini, M. See Matera, F., 41
Tamil, L. S.
—; Yu, Y. S.: A Beam-Propagation Technique to Analyze Integrated Photonic Circuits, 617
Tanaka, M. See Takenaka, T., 94
Tessereau, S.
—; Floc'h, J. M.; Legay, H.; Citerne, J.: Analysis and Measurement of Mutual Coupling Between Two Series-

Fed Electromagnetically Coupled Transverse Dipoles, 265
Toncich, S. S.
—; Bhasin, K. B.; Chen, T. K.; Claspy, P. C.: Performance of a Wideband GaAs Low-Noise Amplifier at Cryogenic Temperatures, 372
Topa, A. L.
—; Paiva, C. R.; Barbosa, A. M.: Rigorous Analysis of a Step Discontinuity in a Dielectric Planar Anisotropic Waveguide, 602
Tran, V. N. See Kooi, P. S., 198
Tretyakov, S. A.
—; Viitanen, A. J.: Perturbation Theory for a Cavity Resonator with a Bi-Isotropic Sample: Applications to Measurement Techniques, 174
Tretyakov, S. A. See Oksanen, M. I., 68
Tronche, C. See Cayrou, J. C., 695
Tsang, K. F.
—; Yip, P. C. L.; Morgan, G. B.: A Technique for the Large-Signal Characterization of Transistors, 516
Tsang, L. See Chen, Z., 520
Tsao, H.-W.
—; Ho, K.-P.; Lee, Y.-H.: The Effect of Laser Chirping on Optical Subcarrier Multiplexed System with High-Bit-Rate Baseband Signal, 4
See Lee, Y.-H., 168
Tsui, C. L. See Jeng, J. Y., 638
Tsui, J. See Lee, C. S., 92
Tu, Y.-K. See Wang, C.-Y., 466

Valco, G. J.
—; Blemker, A. R.; Bhasin, K. B.: Laser Ablated $YBa_2CU_3O_{7-x}$ High Temperature Superconductor Coplanar Waveguide Resonator, 234
Vanbesien, O.
—; Sadaune, V.; Lippens, D.; Vinter, B.; Bois, P.; Nagle, J.: Direct Evidence of the Quasibound-State Lifetime Effect in Resonant Tunneling from Impedance Measurements, 351
van den Brink, R. F. M.
Novel Electrical Noise Source Based on Lightwave Components, 549
van de Roer, T. G. See de Maagt, P. J., 295
Van Deventer, M. O.
Comments on "New Receiver Scheme for Homodyne and Intradyne Satellite Optical Links," 46
van Rensburg, Jr., D. J. J.
—; Malherbe, J. A. G.; McNamara, D. A.: Computation of Electromagnetic Plane-Wave Scattering from a Curved Dielectric Shell Using a Physical Optics Approach, 326
Vaudon, P.
—; Jecko, B.; Reineix, A.: Asymptotic Formulations for the Wedge Diffracted Field, 649
Vaudon, P. See Sekhar Roy, J., 228
Viitanen, A. J.
—; Lindell, I. V.: Perturbation Theory for a Corrugated Waveguide with a Bi-isotropic Rod, 729
See Lindell, I. V., 79
See Tretyakov, S. A., 174
Villegas, M. L. See Zhang, G. F., 381
Vinter, B. See Vanbesien, O., 351
Voranantakul, S.
—; Prince, J. L.: Trade-Off Design for High Speed Pulse Propagation in Microstrip Lines, 306

Wahid, P. F.
—; Christodoulou, C. G.; Rutkowski, K. A.: Radiated Fields of Microstrip Patches at Arbitrary Angular Positions, 7
Wang, C. Y.
—; Tu, Y. K.: Passive Polarization Splitter and Crosstalk Characteristics of Ti:$LiNbO_3$ X Switch, 466
Wang, H.
—; Sangster, A. J.: Field Distortion in a Longitudinal Slot Radiator in a Slotted-Waveguide Array, 715
Wang, J.
—; Fralich, R.: Reply to Comments on "A Simple Approach to a Four-Way Hybrid Ring Power Divider Design," 155
Wang, R. See Li, D., 128
Wang, W. S. See Chao, F.-L., 16
See Lee, K. Y., 99
See Chang, W. C., 218, 563
See Liu, S.-F., 284
See Lau, C.-S., 309, 611
See Jeng, J. Y., 592, 638
See Liu, S. F., 517
Wang, Z. See Zhou, C., 673
Wang, Z. L. See Hau, J. 606
Wei, P. K. See Liu, S. F., 284
See Lau, C. S., 309, 611
Wei, X. See Goel, A. K., 408
Wen, G.
—; Ruan, C.; Lin, W.: A Unified Theory of Electromagnetic Missiles Generated by an Arbitrary Plane Current Source, 337
Wu, H.
—; Liu, D.; Pan, C.: A New Calibration Method for the Four-Port Reflectometer, 423
Wu, J. See Lin, S., 493, 659
Wu, K. See Shen, Y., 261
Wu, T. K.
Single-Screen Triband FSS with Double-Square-Loop Elements, 56

Xie, Y. J. See Liang, C. H., 209
Xu, Y.
—; Bosisio, R. G.: Analysis of Microstrip Circular Rings for MIC, MHMIC, and MMIC Components, 615
Xue, L. See Cheng, D., 65, 135, 545

Yamauchi, J.
—; Ikegaya, M.; Nakano, H.: Bend Loss of Step-Index Slab Waveguides with a Trench Section, 251
Yan, D. See Zhang, J., 321
Yeo, T. S. See Kooi, P. S., 198
Yip, P. C. L. See Tsang, K. F., 516
Yu, C.
On the Maximum Numbers of Independent Adjustable Parameters, Peaks, and Valleys in Arbitrarily Shaped Linear Array Factor, 732

Yu, C. C.
—; Chu, T. H.: Analysis of Step Discontinuities in Dielectric-Slab and Dielectric-Loaded Waveguides Using Geometric-Optics Approach, 576
—; Ju, K. M.: Printed-Circuit Dipole Antenna for Personal Communication Network Handset, 477
Yu, Y. S. See Tamil, L. S., 617
Yu, Z.
—; Lin, W.: A Study of Optically Controlled Millimeter-Wave Propagation Characteristics of a Metallic Rectangular Waveguide Loaded with Double Dielectric Layers, 201
Yuan, N.
—; Ruan, C.; Lin, W.: The Characteristic Impedance of the Stripline and Microstrip Line of the Elliptic Cone, 506

Zhang, G. F.
—; Villegas, M. L.; Ripoll, C. S.; Gautier, J. L.: Microwave Active Filter using GaAs Monolithic Floating Active Inductor, 381
Zhang, J.
—; Zhang, L.; He, A.; Yan, D.: Two-Dimensional Inner-Product Model for Auto-Heteroassociative Memory and Its New Optoelectronic Implementation, 321
Zhang, L. See Zhang, J., 321
Zhang, X.
—; Jiang, P.: Influence of IF Narrow-Band Filtering on BIT Error Rates in Coherent Optical Heterodyne CPFSK Receiver Using Variable Delay Demodulation, 442
See Romero, M. A., 38
Zheng, D. See Hsu, C-I. G., 318
Zhing, S. See Lin, S., 659
Zhou, C.
—; Liu, L.; Wang, Z.; Mo, Y.: Optical Implementation of Hopfield Associative Memory Based on Imaging System Using a Liquid Crystal Device, 673
Zurcher, F. E. See Bonvin, F., 347

Microwave and Optical Technology Letters
Subject Index to Volume 5

ABCD parameters, 613
Absorption coefficient, 542
Acoustic-optical interaction, 453
Acousto-optic deflector, 633
Acousto-optics, 633
Airgap, 315
AlGaAs material, 351
All-optical switch, 433
Almost periodic, 35
Analytical solutions, 675
Anisotropy, 666
Annular ring, 257
Antenna, 31, 81, 130, 709, 713
Antenna arrays, 44
Antenna diversity, 477
Antenna feed, 115
Antenna feed network, 447
Antenna gain, 439
Antenna parameters, 130
Antenna theory, 88
Antennas, 230, 299
Aperture-coupled microstrip patch antenna, 60
Arbitrary body, 606
Arbitrary numerical array synthesis, 732
Arrays, 7, 26, 686
Array antennas, 420
Array factor, 732
Array illuminators, 483
Array pattern, 246
Associative memory, 72
Asymmetric *Y* junction, 638
Asymptotic evaluation, 649
Atmospheric turbulence, 138
Attenuation, 68, 306
Autonomous circuits, 35
Axially magnetized, 228

Background light interference, 148
Backscattering, 557
Backward diode, 295
Balun, 159
Bandgap, 542
Bandpass filter, 177
Bandwidth, 671
Bandwidth extension, 374
Bandwidth statistical method, 273
Basis functions, 590
Beam propagation method, 251, 284, 466, 617
Bent optical waveguides, 251
Biaxially anisotropic media, 275
Bi-isotropic interface, 79
Bi-isotropic media, 163, 174, 343, 729
Binary, 752
Biomedical applications, 679
Bipolar transistor, 10
Bistatic, 653
Blazed gratings, 713
Born approximation, 340
Boundary condition problems, 704
Boundary conditions, 513
Boundary impedance, 68
Bragg cell, 453
Branching synthesis, 559
Broadband, 299
Buffer layer, 218

CAD, 10, 361, 408
Calibration, 621
Cantor target, 460
CCD receiver, 453
Characteristic impedance, 727
Characterization, 509
Chiral, 107
Chiral half-space, 79
Chirality, 174
Chiral material, 31, 184, 303
Chiral media, 101, 343
Chiral waveguide, 68
Circles intersections, 374
Circular polarization, 228
Cladding materials, 22
Coaxial filters, 292
Coaxial line, 19
Coherent inelastic scattering, 606
Combinatorial design, 503
Complex dielectric constant, 209
Complex modes, 635
Complex normalizing impedances, 613
Complex permittivity measurement, 198
Computer-generated holograms, 429
Computerized tomography, 125, 194
Conformal mapping, 757
Conformal microstrip antennas, 221
Constitutive parameters, 303
Contact screen, 279
Convolution back projection, 194
Coplanar waveguide, 60, 234, 420
Corner reflectors, 557
Correlation, 752
Corrugation, 68
Coupled bilateral fin lines, 666
Coupled integral equations, 661
Coupled-line, 159
Coupling, 240, 433, 585
Cross inner conductor, 553
Cryogenic temperatures, 372
Cutoff wavelengths, 161, 757
Cyclostationary processes, 739
Cylindrical structures, 130

DBR lasers, 643
DFB lasers, 643
δ_{max} detection, 269
Degenerate two-wave mixing, 181
Demodulation, 442
Detector, 417
2-D Hopfield model, 321
Dielectric coatings, 288
Dielectric cover, 701
Dielectric image line, 239
Dielectric lens, 92
Dielectric-loaded waveguide, 576
Dielectric planar anisotropic waveguides, 602
Dielectric planar waveguide, 496
Dielectric resonators, 261
Dielectric scattering, 326
Dielectric-slab waveguide, 576
Dielectric waveguides, 188
Dielectrics, 359
Diffraction, 81, 649
Diffraction loss, 401
Diffraction pattern, 460
Diffraction tomography, 94
Diffractive optics, 483
Diffuse IR channel, 148
Dipole radiation, 65
Dipole source, 597
Directive IR channel, 148
Discontinuity, 188
Discriminator, 168
Dispersion, 161, 306, 742
Dispersion self-focusing, 496
Double dielectric layers, 201
Dual circular polarization, 236
Dual-mode tunable semiconductor lasers, 427

Eccentric coaxial waveguides, 757
Edge slot, 686
Effective dielectric constant, 727
Effective relative dielectric permittivity, 361

Efficiency, 166
Electromagnetically coupled, 115
Electromagnetic boundary conditions, 682
Electromagnetic coupling, 447, 736
Electromagnetic missiles, 337
Electromagnetic waves, 171, 393
Electromagnetics, 225, 343
Electronically tunable filters, 328
Electro-optic effect, 611
Electrostatic image, 597
Electrostatics, 627
Elementary dipole sources, 135
Elliptic cone microstrip line, 506
Elliptic cone stripline, 506
Endfire arrays, 44
Epitaxial layer, 542
Equipotential, 18
Erbium-doped fiber, 191
Extended boundary condition method, 606
External cavity semiconductor laser, 427
Extinction ratio, 638

Fabry–Perot interferometer, 218
Far-fields, 228
Fast algorithm, 146
FDTD, 299
Feedback, 752
Ferrites, 228, 685
Ferrite substrate, 742
Ferroelectric material, 722
FET amplifier, 260
FET modeling, 377
Fiber couplers, 118
Fiber filter, 181
Fiber optic connectors, 157
Fiber optics, 157
Field distribution, 686
Field-effect transistor, 408
Filtered backprojection, 340
Filters, 56, 76, 215, 547
Finite-difference method, 261
Finite-difference time-domain (FDTD), 288, 486, 685
Finite-element analysis, 16
Finite element method, 369, 513
Finlines, 141
Fourier transformation techniques, 135
Four-port reflectometer, 423
Free space measurement, 303
Frequency divider, 398, 721
Frequency modulation, 168
Frequency multiplier, 547
Frequency scanning, 713
Frequency selective surface, 56
Fresnel-zone plate antenna, 49
Frobenius series, 675
Full multiple scattering, 521
Full-wave analysis, 254
Functional analysis, 590

GaAs FET, 403
GaAs low-noise amplifier, 372
GaAs MESFET modeling, 748
GaAs MESFET technology, 112
Gain, 92
Galerkin method, 141, 411
Gallium arsenide, 408
Gallium phosphide, 647
Gap coupling, 88
Gate mixers, 695
Gaussian profile, 675
General variational principle, 209
Generalized born approximation, 746
Geometrical theory of diffraction, 524
Geometric optics, 576
Grating, 279
Grating coupler, 333
Green's function, 225, 566
Grounded chiral slab, 65
Gunn domain effects, 748

Half-wave voltage, 218, 638
Hansen–Woodyard arrays, 44
Harmonic balance, 35, 580
Harmonic generation, 22, 354
HEMTs, 38, 395
Heterostructures, 38, 417
High electron mobility transistor, 1, 395
Higher-order modes, 292
High-speed processor, 330
High-T, 234
High T_c superconductors, 722
High-temperature superconductors, 257
Hot carrier diode, 239
Hysterisis, 215

Ill-conditioned least-squares matrix, 537
Image synthesis, 429
Impedance, 123
Impedance bandwidth, 709
Improved Born inversion, 340
Indium tinoxide, 218
Indoor infrared transmission, 148
Induced convection, 16
Inflection frequency, 306
Infrared, 480
Inhomogeneity, 333
Inner-product, 321
Integrated circuit, 56
Integrated optics, 309, 466, 490
Interconnects, 388
Intermodulation, 377
Inverse scattering, 94, 194, 359, 746
Ion plating, 585
Irradiance shaping, 483
IR signal power, 148
Isotropic media, 79
Iterative methods, 347, 423
Iterative reconstruction algorithm, 94
Iterative techniques, 530

Jacobian function identities, 86
Joint transform, 752

Ka band, 1
Kelvin inversion, 597
Kerr effect, 496
Kirchhoff diffraction theory, 49

Large signal, 398, 580
Laser ablated thin film, 234
Laser beam diameter measurement, 279
Laser chirping, 4
Layered medium, 318
Leaky wave, 130, 718
Least-squares boundary residual method, 602
Light history, 215
Lightwave components, 549
Limit design, 260
Lindell formulation, 209
Linear antenna array, 732
Linear independence, 590
Linearly tapered slot antenna, 420
Linear systems, 429
Liquid-phase epitaxy, 16
Lithium niobate, 309, 490
Local oscillator, 395
Lossy Kerr nonlinear medium, 433
Lossy target, 325
Low-frequency scattering, 597
Low-noise amplifier, 1
LSBR method, 141, 537
Lumped capacitator, 240
Lumped coupler, 240
Lumped inductor, 240
Luneburg lens, 92

Matched load, 265
Matrix analysis, 135
Maximum oscillation frequency, 351

Meander lines, 477
Measurement, 174
Measurement techniques, 580
MESFET mixers, 695
Metallization, 585
Method of moments, 590, 691
Microstrip, 31, 123, 128, 130, 177, 230, 265, 572, 635
Microstrip antenna, 228, 236, 254, 257, 315, 347, 701
Microstrip array, 236
Microstrip dipole, 709
Microstrip discontinuities, 411, 661
Microstrip dispersion, 361
Microstrip ICs packaging, 388
Microstrip lines, 306, 742
Microstrip patch, 7
Microstrip patch antenna array, 88
Microstrip rings, 76
Microstrip transmission lines, 469
Microstripline circuits, 585
Microwave, 81
Microwave active filter, 381
Microwave circuits and systems, 695
Microwave floating active inductor, 381
Microwave hyperthermia, 679
Microwave imaging, 194, 340, 359
Microwave integrated circuits, 566
Microwave measurements, 372
Microwave monolithic circuits, 328
Microwave pulse generator, 211
Microwave resonators, 313
MICs, 537
Millimeter-wave devices, 354
Millimeter wave measurements, 423
Millimeter waves, 398, 547, 623
MIS substrate, 661
Mixer, 417
Mixer analysis, 695
Mixer modeling, 695
MMIC technology, 369, 530
Modal analysis, 292
Mode field radii, 161
Mode identification techniques, 704
Modeling, 10
Mode matching, 718
Modified Newton-Kantorovich method, 94
Modulated device doping profile, 354
Moment methods, 292, 359, 704, 715
Monolithic microwave integrated circuit, 721
Monopole, 691
Multiharmonic load-pull measurement, 403
Multilayer, 727
Multiobject, 752
Multiple dielectric layers, 439
Multiple pulse position modulation (MPPM), 269
Multipliers, 403
Multiport networks, 666
Mutual coupling, 265, 572

Narrow beams, 26
Near field, 653
Network, 41
Network analyzer, 559
Network solutions, 668
Network synthesis, 159
Network theory, 746
Neural computing, 72
Neural networks, 72
Noise, 168, 534
Noise measurement, 549
Non-identical elements, 26
Non-Kerr-like nonlinearity, 517
Nonlinear circuits, 35, 377, 534
Nonlinear guided wave, 517
Nonlinear optics, 284, 647
Nonlinear oscillator, 398
Nonlinear surface wave, 517
Nonreciprocity, 174
Nonspherical particles, 520
Nonuniform line, 736
Numerical analysis, 718
Numerical methods, 101, 486, 627

Off-center cross inner conductor rectangular line, 553
Off-centered strip inner conductor rectangular line, 62
Omnidirectional, 246
Open microstrip lines, 275
Open resonators, 401
Open waveguides, 602
Optical amplifier, 191
Optical amplifier applications, 118
Optical cellular automata, 493
Optical channels, 503
Optical communications, 4, 138, 168, 191, 269, 284, 367, 442, 739
Optical computing, 72, 125, 493, 659
Optical coupling, 99
Optical detection, 367
Optical fiber communications, 118
Optical fibers, 22, 161, 273, 509, 675
Optical fuzzy logic, 659
Optical image processing, 659
Optical implementations of neural networks, 673
Optical information processing, 493
Optical interconnection, 330
Optical interconnects, 483
Optical integration, 493
Optically controlled millimeter wave, 201
Optical logic, 659
Optical-microwave interactions, 38
Optical mixing, 427
Optical parallel processing, 493
Optical receiver, 442
Optical switch, 211
Optical switching, 330
Optical time domain reflectometry, 157
Optical waveguides, 99, 309, 490
Optoelectronic switching, 112
Optoelectronics, 76
Orthogonality, 292
Oscillators, 38, 215
Oval cylinders, 19

Parabolic reflector antenna, 49
Parallel-plate waveguide, 318
Parallel/series feed, 230
Parameter tolerances, 273
Partially compensated buffer layer, 112
Passive radiation pattern control, 347
Patch antenna, 115, 123, 447, 572
Path-integral method, 225
Periodic gratings, 480
Periodic structure, 513
Periodic waveguides, 718
Permeability, 313
Permittivity, 313
Perturbation, 174, 209
Perturbation theory, 729
Phase gratings, 483
Phase measurement, 623
Phase modulator, 218
Phase shifter, 184, 722
Photoconductivity, 38
Photoconductors, 215
Photonic circuit analysis, 617
Photorefractive effect, 181
Physical optics, 326, 653
Picosecond optical pulses, 211
Planar applicators, 679
Potential function, 746
Printed circuit, 477
Process deterioration, 592, 638
Projection, 194
Propagation characteristics, 201
Propagation delays, 408

Proton exchange, 490
Prototype, 267
Proximity-coupled microstrip patch antennas, 60
Pseudochiral, 184
Pulse radiation, 299

Q factor, 401, 585
Quadruple pulse position modulation, 503
Quasibound-state lifetime effect, 351
Quasioptical technique, 623
Quasioptics, 547

Radar cross sections (R.C.S.), 171, 267, 325, 326, 557, 621, 653
Radiation, 188
Radiation conditions, 393
Radiation efficiency, 439
Radiation pattern, 7, 31, 65
Radiometry, 295
Rainwater, 198
Reactance, 215
Reciprocal devices, 184
Reciprocity, 343
Reconstruction, 746
Rectangular coaxial line, 86, 553
Rectangular waveguide, 686
Recursive algorithm, 146
Reference value, 374
Reflection, 107
Reflection gratings, 171, 557
Reflectivity measurement, 621
Reflectometer, 559
Reflector, 81
Relative convergence, 537
Relaxation technique, 627
Resonant-tunneling diode, 351
Resonators, 76, 234
Riccati equations, 107
Rotating inner cross-conductor, 553

Scale factor, 325
Scale model, 267
Scattering, 81, 163, 171, 393, 480, 524, 682
Scattering parameters, 661
Scattering pattern, 333
Schottky-diode, 295
Semiconductor lasers, 99, 152
Series feeding, 265
Series resonance, 177
Shortened dipole antenna, 477
Shot-noise calibration, 549
Sidelobes, 26
Signal separator, 559
Similarity, 325
Six-port, 403, 559
Six-port reflectometer, 374
Slot arrays, 715
Slot line, 420
Slow decrease of electromagnetic energy, 337
Small signal equivalent circuit, 351
Solitary waves, 517
Soliton, 41, 284
Sommerfeld integral, 566
S parameters, 613
Spatial filtering, 429
Spatial filters, 347
Spatial soliton, 433
Spectra, 739
Spectral domain analysis, 315, 411, 701
Spectral-domain method, 275, 666, 679
Spectral lines, 453
Spectrum analyzer, 453
Spectrum domain method, 254, 635
Spherical-circular microstrip antenna, 221
Spherical-conal coordinate, 506
Spurious solutions, 704
Square-law detection, 295
Stability, 260
Steiner systems, 503
Step discontinuities, 576, 602
Stratified chiral media, 135
Stratified media, 107
Strip array, 623
Strip gratings, 713
Striplines, 246, 727
Strip-loaded outdiffusion guide, 611
Strip scattering, 146
Subcarriers multiplexed system, 4
Substrate-superstrate structures, 469
Superconductors, 234, 369
Superdirectivity, 44
Superstrate, 123, 254
Superstrate layers, 347
Surface and bulk modes, 704
Surface impedance, 267, 325
Surface impedance boundary condition, 486
Surface patch moment method computations, 686
Synchronization, 739
Synthetic noise, 549

Tapered antipodal finline, 128
Tapered grating, 643
Tapered slot antenna, 246
Target diffraction, 460
Taylor series, 675
TDMA, 41
TEM mode, 736
Testing functions, 590
Thick microstrips, 530
Thin wires, 288
Three-dimensional diffusion, 592
Three-guide coupler, 563
Threshold, 752
Threshold detection, 138
Time domain, 261, 524
Titanium indiffusion, 611
Trade-off design, 306
Transfer efficiency, 563
Transferred-electron devices, 354
Transistor modeling, 580
Transition, 128
Transmission line, 736
Transmission lines theory, 141
Traveling-wave laser amplifiers, 152
Triangular antenna, 239
Tuning, 563
Tuning ratio, 671
Tunnel diode, 295
Two resonant modes, 313

Uniaxial medium, 318

Varactor-tuned oscillators (VTO), 671
Variable noise sources, 549
Variational method, 691
VCO, 395
Vectorial radiation pattern, 49
Vector radiative transfer theory, 520
Vernier fiber ring resonator, 181
Voltage-controlled oscillator, 395

Waveguide, 128, 715, 729
Waveguide loaded with dielectric, 201
Wavelength division multiplexing, 633
Wave plate heteroassociation, 321
Wedge, 649
Wide band, 1
Wideband components, 388
Wire dipoles, 101

Y junction, 592

Zero dispersion, 273